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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/718,050	11/20/2003	Ralph D. Gillespie	106207-1	9299
23490 7	23490 7590 10/15/2004		EXAMINER	
JOHN G TOLOMEI, PATENT DEPARTMENT			HAILEY, PATRICIA L	
UOP LLC	ONQUIN ROAD		ART UNIT	PAPER NUMBER
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DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		10/718,050	GILLESPIE ET AL.
		Examiner	Art Unit
		Patricia L. Hailey	1755
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with	the correspondence address
- Exter after: - If the - If NO - Failur Any n	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. usions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a rep- period for reply is specified above, the maximum statutory period to to reply within the set or extended period for reply will, by statut eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a repoly within the statutory minimum of thirty will apply and will expire SIX (6) MONTI	oly be timely filed (30) days will be considered timely. HS from the mailing date of this communication.
Status	•		
1)⊠	Responsive to communication(s) filed on 22 J	luly 2004	
		s action is non-final.	A.T.
	Since this application is in condition for allowa		re procedution as to the
,	closed in accordance with the practice under	Ex parte Quavle 1935 C.D.	a, prosecution as to the ments is
	on of Claims	ex parte quayle, 1999 G.D.	11, 433 O.G. 213.
	Claim(s) <u>1-23</u> is/are pending in the application		
5)[]	la) Of the above claim(s) is/are withdra Claim(s) is/are allowed.	wn from consideration.	
	Claim(s) <u>1-23</u> is/are rejected.		
	Claim(s) is/are objected to.		
	Claim(s) are subject to restriction and/o	or election requirement.	
Application	on Papers		
9) <u></u> ⊤	he specification is objected to by the Examine	er.	
	he drawing(s) filed on <u>20 November 2003</u> is/a		biected to by the Evaminer
A	Applicant may not request that any objection to the	drawing(s) be held in abevance	. See 37 CFR 1 85(a)
F	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s)	is objected to See 37 CFR 1 121(d)
11)[] T	he oath or declaration is objected to by the Ex	caminer. Note the attached C	Office Action or form PTO-152
	nder 35 U.S.C. § 119		
a)[_	cknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 1	19(a)-(d) or (f).
	— a service suprise of the priority decemberts		
	Certified copies of the priority documents	s have been received in App	lication No
3	Copies of the certified copies of the prior	ity documents have been red	ceived in this National Stage
* 0 -	application from the International Bureau	(PCT Rule 17.2(a)).	
Se	e the attached detailed Office action for a list of	ot the certified copies not rec	eived.
ttachment(s			
Notice o	of References Cited (PTO-892)	4) 🔲 Interview Sum	mary (PTO-413)
)	of Draftsperson's Patent Drawing Review (PTO-948) tion Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/M	ail Date
Paper N	lo(s)/Mail Date	5) Notice of Inform 6) Other:	nal Patent Application (PTO-152)
Patent and Trade			
OL-326 (Rev	Office Act	tion Summary	Part of Paper No./Mail Date 100504

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Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-8 and 10-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. 10/872,581.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the '581 application recite the presence of an additional component comprising an inorganic oxide binder having deposited thereon at least one platinum group metal component, whereas the claims in the instant application recite the presence of an additional component comprising an inorganic oxide binder. See claims 1 and 7 of the '581 application, and claims 1 and 7 of the instant application.

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Because the conflicting claims each recite the open term "comprising", no additional components, either expressed or not expressed, are excluded by the respective sets of claims.

With respect to the remaining claims, claims 2-4 and 8 in the instant application are the same as claims 2-4 of the '581 application (claim 4 herein contains the same limitations as claims 4 and 8 in the instant application), and claims 5, 6, and 10-13 in the instant application correspond to claims 5, 6, and 8-11 in the '581 application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Double Patenting/35 U.S.C. 101

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

4. Claims 1-13 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-26 of prior U.S. Patent No. 6,706,659. This is a double patenting rejection.

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Claims 1 and 6 in the instant application correspond to Patent Claims 1 and 9. Claims 2-5 in the instant application correspond to Patent Claims 2-5 and 15-20. Instant Claims 7-13 correspond to Patent Claims 6-8, 10-13, and 22-25. Instant Claims 1 and 7 correspond to Patent Claims 14 and 21. Instant Claims 1 and 9 correspond to Patent Claim 26.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 4, 5, 9-11, and 13 are rejected under 35 U.S.C. 102(2) as being anticipated by Nemeth et al. (U. S. Patent No. 6,359,179).

Nemeth et al. teach a strong acid solid catalyst comprising sulfated zirconia (col. 3, line 63 to col. 4, line 20; this disclosure is considered to inherently teach the limitations of claims 4 and 5), promoters such as iron, cobalt, nickel, the lanthanide elements, and mixtures thereof (col. 4, lines 40-45), and a hydrogenation catalyst component. Examples of the hydrogenation catalyst component include Group VIII metals (e.g., the platinum group metals), molybdenum, tungsten, and mixtures thereof, in amounts of from about 1 to about 10 wt. % as the metal. See col. 4, lines 52-64 of Nemeth et al.

Both the promoters and the hydrogenation catalyst components can be incorporated or combined with the solid acid (e.g., sulfated zirconia) by means such as impregnation, spray drying, or by coprecipitation. See col. 4, lines 45-49 and lines 64-67 of Nemeth et al.

In view of these teachings, Nemeth et al. anticipate claims 1, 4, 5, 9-11, and 13.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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- 8. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 10. Claims 2, 3, 12, and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemeth et al. (U. S. Patent No. 6,359,179).

Nemeth et al. is relied upon for its teachings in the above 102(e) rejection. However, while Nemeth et al. teach the presence of lanthanides and iron as exemplary promoters, this reference does not teach or suggest any amounts for the promoters (claims 2, 3, and 12).

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It would have been obvious to one of ordinary skill in the art to determine through routine experimentation the optimal amounts of lanthanides and/or iron, in an endeavor to obtain a solid acid catalyst having optimal properties.

Nemeth et al. at col. 4, lines 40-42 disclose that promoters such as the lanthanides and iron may be incorporated into the catalyst to increase catalyst activity for specific reactions.

With respect to claims 14-23, the Examples of Nemeth et al. show exemplary techniques for preparing Patentees' solid acid catalyst. In Examples 6 and 7, hydrous zirconium hydroxide is impregnated with manganese nitrate (a promoter; see col. 4, lines 42-44) followed by impregnation with ammonium sulfate and then with chloroplatinic acid. While the first two steps are opposite that respectively claimed, Nemeth et al. at col. 4, line 67 to col. 5, line 2 state that the hydrogenation component and the promoter can be added in any order, including simultaneously. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have reversed the order, for example, by impregnating the hydrous zirconium hydroxide with ammonium sulfate and then with manganese nitrate, because reversing the order of steps in a process does not impart patentability when no unexpected result is obtained. Ex parte Rubin (POBA 1959) 128 U.S.P.Q. 440, Cohn v. Comr. Pats. (DCDC 1966) 251 F Supp 378, 148 U.S.P.Q. 486.

The Examples of Nemeth et al. are discussed to merely exemplify Patentees' invention, and are not considered to be the sole invention of Nemeth et al. Teachings of

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a reference are not limited to a preferred embodiment. <u>In re Boe</u>, 145 U.S.P.Q. 507 (CCPA 1966).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Hailey/plh

Examiner, Art Unit 1755

October 5, 2004

/ Mark L. Bell

Supérvisory Patent Examiner Technology Center 1700